

21 NOVEMBER 2012



Civil Engineer

**FIRE PROTECTION AND
PREVENTION PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at www.e-Publishing.af.mil for downloading or ordering

RELEASABILITY: There are no releasability restrictions on this publication

OPR: 374 CES/CEF

Certified by: 374 MSG/CC
(Col Edward R. Brown)

Pages: 33

This instruction implements Air Force Policy Directive (AFPD) 32-20, Fire Protection, and DOD Instruction (DODI) 6055.06, Department of Defense Fire and Emergency Services Program, Department of Labor – Occupational Safety and Health Administration (OSHA), Unified Facilities Criteria (UFC), and National Fire Protection Association (NFPA) standards as Air Force policy unless otherwise directed in DOD or Air Force instructions. This instruction supplements Air Force Instruction (AFI) 32-2001 as a 374th Air Base Instruction (374 ABI). This instruction provides guidance for implementing and maintaining a sound fire prevention program and establishes responsibilities, procedures and practices for effective control and elimination of fire hazards. It applies to all military personnel, their dependents, civilian personnel (American and local national), tenants, contractors and concessionaires that reside or work on Yokota Air Base (AB). Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, Management of Records, and dispose of IAW the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afrims/afrims/afrims/rims.cfm/> Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through their appropriate functional chain of command.

Chapter 1—ADMINISTRATION AND ENFORCEMENT

4

- | | | |
|------|---|---|
| 1.1. | Program Objective. | 4 |
| 1.2. | Authority Having Jurisdiction (AHJ). | 4 |

1.3.	Responsibilities.	4
1.4.	Fire Prevention and Protection Program.	5
1.5.	Plans Review/Engineering Program.	6
1.6.	Permits and Approval.	6
Chapter 2—GENERAL REQUIREMENTS		7
2.1.	Fire Evacuation Plans.	7
2.2.	Emergency Procedures.	7
2.3.	Fire Drills.	8
2.4.	Fire Extinguishers.	8
2.5.	General Housekeeping Practice.	9
2.6.	Space Heaters/Heating Appliances.	10
2.7.	Candles and Aroma Therapy Devices.	10
2.8.	Decorations.	11
2.9.	Electrical Fire Safety.	11
2.10.	Cooking.	12
2.11.	Commercial Cooking.	13
2.12.	Open Fire/Barbeques/Fireworks.	14
2.13.	Tobacco Use.	14
2.14.	Special Events.	15
Chapter 3—OCCUPANCY REQUIREMENT		17
3.1.	Notification of Public Gathering and Change of Occupancy.	17
3.2.	Public Assembly.	17
3.3.	Educational Occupancy.	17
3.4.	Family Housing	18
3.5.	Dormitory and Lodge Occupancy.	19
3.6.	Child Care Facilities.	19
Chapter 4—MEANS OF EGRESS		20
4.1.	Exits/Exit Doors.	20
4.2.	Stairways.	20
4.3.	Exit signs/Emergency Lighting.	20
4.4.	Illumination of Means of Egress.	20
4.5.	Marking of Means of Egress.	20

Chapter 5—INSTALLED FIRE DETECTION/SUPPRESSION SYSTEM	21
5.1. Maintenance and Testing.	21
5.2. Acceptance Test.	21
5.3. Fire Doors/Fire Shutters.	22
5.4. Fire Hydrant.	22
5.5. Fire Lane.	22
Chapter 6—HAZARDOUS MATERIALS	23
6.1. Hazardous Material Identification.	23
6.2. Explosive.	23
6.3. Storage and Handling of Flammable and Combustible Liquids.	23
6.4. Compressed Gas Cylinders.	25
Chapter 7—FIRE SAFETY STANDARDS DURING CONTRACTOR PERFORMANCE	26
7.1. General Requirements.	26
7.2. Flammable and Combustible Liquids and Gasses.	26
7.3. Hot Work Operations.	26
7.4. Driving Responsibilities.	27
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION	28
Attachment 2—FACILITY FIRE SAFETY CHECKLIST	32
Attachment 3—SAMPLE FLAMMABLE LOCKER LETTER	33

Chapter 1

ADMINISTRATION AND ENFORCEMENT

1.1. Program Objective.

1.1.1. The Fire Protection and Prevention Program ensures that the mission of Yokota AB is not impaired by fire. To reach this objective, we must eliminate the potential causes of fire, reduce the loss of life, injuries, property damage, and protect the environment should a fire occur. In order for people to support an aggressive fire prevention program, they must be knowledgeable in the elimination of fire hazards and fire reporting procedures. This knowledge can minimize and reduce injury and monetary loss if a fire occurs. This is done through the education of all personnel, command support at all levels, and enforcement of safe practices. Therefore, fire prevention and fire safety issues will not be compromised for reason of expediency or economy.

1.1.2. Carelessness is the leading cause of fire. All personnel shall observe preventive measures. Unit Commanders and Supervisors will enforce this instruction as it pertains to their units and will take appropriate administrative or disciplinary action in cases of willful misconduct or negligence involving fire prevention policies and fire loss to government property.

1.2. Authority Having Jurisdiction (AHJ).

1.2.1. The Commander, 374th Airlift Wing (374 AW/CC), establishes the installation Fire Protection and Prevention Program.

1.2.2. The Commander, 374th Civil Engineer Squadron (374 CES/CC), is designated the Fire Marshal and serves as a staff advisor to the Commander, 374th Mission Support Group (374 MSG/CC), on fire protection matters. The Fire Marshal is authorized to abate any operations or processes considered to be a fire or explosive hazard.

1.2.3. The Fire Chief, 374 CES (374 CES/CEF), is the Fire Emergency Services Flight Chief and responsible to the base Fire Marshal for establishing and carrying out an effective fire protection and prevention program. In the absence of the 374th Civil Engineer Squadron Commander, the Fire Chief shall serve as Fire Marshal.

1.2.4. The Assistant Chief for Fire Prevention, 374 CES (374 CES/CEFP), is responsible for determining instruction compliance, adequacy of life safety, and approving acceptable measures or equipment that meet the objectives of this instruction. During coordination, where agreement cannot be reached, the Fire Marshal's decision shall prevail.

1.2.5. The Programs Flight Chief, 374 CES (374 CES/CEP), shall establish procedures to ensure the Fire Emergency Services Flight is notified of all pre-construction conferences. A Fire Emergency Services Flight representative shall attend these conferences to coordinate fire prevention requirements with the contractors.

1.3. Responsibilities.

1.3.1. Fire Chief. The Fire Chief shall be responsible to the base Fire Marshal for establishing and managing an effective fire protection and prevention program. Through the

Assistant Chief for Fire Prevention, the Fire Chief develops and administers the Installation Fire Prevention Program.

1.3.2. Functional Manager. The Functional Manager is the commander or senior operating official at any level that exercises managerial control of an activity or operation. Functional Managers shall be responsible for administering the fire prevention program within their functional area and for initiating corrective action on fire hazards and fire safety deficiencies. They shall also ensure each person receives a fire prevention orientation within 30 days after arrival and Facility Managers receive familiarization training on building fire protection system, good fire prevention practices, and inspection procedures.

1.3.3. Facility Managers/Unit Safety representatives. The Facility Manager/Unit Safety representative shall aid Unit Commanders in maintaining a fire safe condition of all facilities under their jurisdiction. The Facility Manager/Unit Safety representative or designated alternate shall accompany the Fire Emergency Services Flight representative during the fire prevention visit and take immediate corrective action on fire hazards or fire safety discrepancies found during the inspection.

1.3.3.1. Facility Manager/Unit Safety representative shall attend the Facility Manager training class provided by the 374 CES Operations Flight (374 CES/CEO).

1.3.3.2. Facility Manager/Unit Safety representative shall perform daily inspections in their area of responsibility to ensure first aid fire fighting appliances, fire protection systems, and fire safety features are in proper condition, operation, and comply with Fire Emergency Services Flight guidance. See Attachment 2 for sample fire safety checklist.

1.3.3.3. Facility Manager/Unit Safety representative shall maintain a fire safety file to include:

Fire extinguisher training record for all personnel within their area of responsibility

AF Form 1487, *Fire Prevention Visit Report*, and Fire Inspection Checklist

AF Form 332, *Base Civil Engineer Work Request*

Monthly fire extinguisher inspection record

1.3.3.4. Facility Manager/Unit Safety representative shall enforce all provisions of this instruction and report any unsafe conditions beyond their control to the Unit Commander and the Fire Emergency Services Flight.

1.4. Fire Prevention and Protection Program.

1.4.1. The base Fire Marshal (374 CES/CC) shall be responsible to the Wing Commander for fire prevention and fire protection at this installation and other activities where facility engineering support is provided. Additionally, he/she shall be responsible for the technical development and execution of an effective fire prevention and protection program for the entire installation and other support activities.

1.4.2. Fire Inspection Program: The Fire Emergency Services Flight performs facility inspections and advises Unit Commanders, Facility Managers, and Supervisors of hazards and fire safety deficiencies noted in their facilities. The primary responsibility for correcting

identified fire hazards or fire safety deficiencies rests with the Unit Commander and Facility Manager. Each facility shall be inspected by a Fire Emergency Services Flight representative or as determined by the Fire Chief, in compliance with AFI 32-2001, *Fire Emergency Services Program*.

1.4.3. Public Education: The Fire Emergency Services Flight is available to present fire prevention lectures and demonstrations. To request training, contact the Fire Prevention section at 225-9112.

1.5. Plans Review/Engineering Program.

1.5.1. For new construction, modification, or rehabilitation, the Fire Emergency Services Flight and Programs Flight (374 CES/CEP) shall have the authority to review construction documents and shop drawings. All work shall be documented on an AF Form 332, *Base Civil Engineer Work Request*, and coordinated through 374 CES Customer Service Section (374 CES/CEOSC) for the applicable sections review.

1.5.2. It shall be the responsibility of the applicant to ensure the construction documents include all of the fire protection requirements and the shop drawings are correct and comply with all applicable standards and regulations.

1.5.3. Fire Protection Engineering. The Programs Flight manages fire protection engineering requirements as prescribed by the current edition of UFC 3-600-01, *Fire Protection Engineering for Facilities*. The Fire Chief provides consultation and design recommendations regarding firefighting operational requirements. This coordination shall not indicate fire protection engineering design acceptance.

1.5.4. All AF Form 103, *Base Civil Engineering Work Clearance Request*, requests shall be coordinated through Fire Emergency Services Flight for approval (includes but is not limited to confined spaces, alarm outage, power outage, road closures, utility outage, etc).

1.5.5. Review and approval by the Authority Having Jurisdiction shall not relieve the applicant of the responsibility to comply with applicable standards or instructions.

1.6. Permits and Approval.

1.6.1. Welding, Cutting and Brazing. Welding, Cutting and Brazing operations shall comply with AFOSH STD 91-5, *Welding, Cutting and Brazing*. If these operations will be conducted outside of an approved welding area, the Fire Prevention Office shall be contacted, at 225-9112, to inspect the work site and equipment. If the operation is safe, an AF Form 592, *USAF Welding, Cutting and Brazing Permit*, shall be issued.

1.6.2. Shops performing welding operations that comply with Fire Emergency Services Flight regulations shall be trained and certified to issue their own AF Form 592, *USAF Welding, Cutting and Brazing Permit*.

1.6.3. Open burning (campfires, bonfires, burn pits, etc) shall be prohibited. At the user's request, the Fire Emergency Services Flight shall perform a fire safety inspection of the area to be used. If the area is found to be safe and complies with the Fire Emergency Services Flight guidance, then an AF Form 592, *USAF Welding, Cutting and Brazing Permit*, shall be issued.

Chapter 2

GENERAL REQUIREMENTS

2.1. Fire Evacuation Plans.

2.1.1. Fire Evacuation Plans shall be submitted to the Fire Emergency Services Flight for review and approval.

2.1.2. A fire Evacuation Plan shall be prepared and filed for every facility. The facility Manager shall maintain the evacuation plan in the Facility Manager folder, Fire Safety section.

2.1.3. All employees shall be provided the applicable evacuation information within 30 days after arrival and a refresher annually thereafter.

2.1.4. The plan shall include multiple ways to evacuate the area and a meeting place outside the facility that will comply with Fire Emergency Services Flight, NFPA 101, *Life Safety Code*, DODI 6060.2, *Child Development Programs*, UFC 4-740-14, *Design: Child Development Centers*, AFI 34-249, *Youth Programs*, AFMAN 34-251, *Air Force School-Age Programs*, and AFI 34-276, *Family Child Care Programs*.

2.1.5. The Fire Evacuation Plan shall be posted in conspicuous locations throughout the facility in compliance with Fire Emergency Services Flight guidance and NFPA 101, *Life Safety Code*, where required.

2.2. Emergency Procedures.

2.2.1. All fires or suspected fires shall be reported to the Fire Emergency Services Flight regardless of size, condition, or type.

2.2.2. In order to report emergencies from base phones, the individual shall call 911. In order to report an emergency from off-base or from a cell phone, the individual shall call 042-552-2511 and dial 911 after the tone.

2.2.3. Use the **SPEED** method in response to a FIRE:

Sound the alarm

Phone the Fire Emergency Services Flight

Evacuate the area

Extinguish if the fire is small

Direct the Fire Emergency Services Flight responders upon arrival

2.2.4. Upon hearing the fire alarm, ALL occupants shall immediately evacuate the facility.

2.2.5. Evacuated personnel shall convene at the Meeting Place for accountability. Report any missing or possibly missing personnel to the Fire Emergency Services Flight responders.

2.2.6. Drivers shall yield the right-of-way to all emergency response vehicles.

2.2.7. Vehicles shall not be driven over fire hose and shall not proceed through areas where firefighting operations are being conducted; unless, directed by a designated traffic control representative.

2.3. Fire Drills.

2.3.1. Fire drills shall be scheduled and conducted by Facility Managers or Unit Safety representatives. Frequency of the required fire drills shall comply with Fire Emergency Services Flight, NFPA 101, *Life Safety Code*, AFI 34-248, *Child Development Centers*, DODI 6060.2, *Child Development Programs*, UFC 4-740-14, *Design: Child Development Centers*, AFI 34-249, *Youth Programs*, AFMAN 34-251, *Air Force School-Age Programs*, and AFI 34-276, *Family Child Care Programs*.

2.3.2. Fire drills shall be coordinated with the Fire Emergency Services Flight. The Fire Emergency Services Flight shall be afforded the right to observe and evaluate every fire drill.

2.3.3. Fire drills shall be held at expected and unexpected times and under varying conditions to simulate the unusual conditions that may occur in an actual emergency. Where required, fire drills shall comply with the Fire Emergency Services Flight procedures and NFPA 101, *Life Safety Code*.

2.3.4. Records of fire drills shall be maintained in the Facility Manager Folder, Fire Safety section.

2.4. Fire Extinguishers.

2.4.1. It is the using individual's responsibility to immediately report the use of or damage to any fire extinguisher to the Fire Emergency Services Flight.

2.4.2. Fire Extinguisher placement shall comply with Fire Emergency Services Flight guidance and NFPA 101, *Life Safety Code*, where required. The Fire Emergency Services Flight shall provide Facility Managers information on facility fire extinguisher requirements. Fire extinguishers shall not be moved or relocated without approval by fire prevention personnel, except those provided for use near aircraft or mounted on vehicles.

2.4.3. Fire extinguishers shall not be obstructed or blocked in any manner that would prevent their immediate access and use. Fire extinguishers shall be mounted to a wall with an approved extinguisher bracket or placed in a cabinet designed for that purpose. Fire extinguishers shall not be placed on shelves nor will they be utilized as doorstops. Fire extinguisher signs shall be either in English or English/Japanese.

2.4.4. The Facility Manager shall be responsible for fire extinguishers in areas under their control. The visual inspection of the fire extinguishers shall comply with Fire Emergency Services Flight guidance and AFI 91-203, *Air Force Consolidated Occupational Safety Standard*. Defective extinguishers shall be delivered to Fire Emergency Services Flight for disposal.

2.4.4.1. Monthly fire extinguisher inspections shall include:

- Safety pin and/or seal is intact

- Sufficient pressure on gauge (if applicable)

- Deterioration of any components

Any physical damage to the extinguishers

Identification serial number

Date for next required maintenance inspection

Date for required hydrostatic test

Presence of a monthly inspection record

2.4.4.2. Monthly fire extinguisher inspection records shall be kept on a tag or label attached to extinguisher, on an inspection checklist maintained on file, or by an electronic method.

2.4.4.3. Monthly documentation of fire extinguisher inspections shall include, at a minimum, the date in which the inspection was performed and the initials of the person who performed the inspection.

2.4.5. All employees shall be provided the applicable fire extinguisher training within 30 days after arrival and a refresher annually thereafter. This training shall be maintained in the Facility Manager Folder, Fire Safety section.

2.4.5.1. Fire extinguisher training is available upon request from Fire Emergency Services Flight, Fire Prevention Office at 225-9112. This training is also available from the Unit Safety representative or through Advanced Distributed Learning Service (ADLS) website (<https://golearn.csd.disa.mil/kc/login/login.asp>), course title *Fire Extinguisher Safety*.

2.4.6. Fire Extinguishers shall be purchased and/or replaced by the respective unit in compliance with Fire Emergency Services Flight guidance and AFI 91-203, *Air Force Consolidated Occupational Safety Standard*.

2.4.7. Vehicle mounted fire extinguishers. Inspections shall be the responsibility of the using agency. These fire extinguishers shall be vigorously shaken by hand monthly; this will help prevent the chemical agent from compacting and solidifying. Initial and refresher training for personnel who inspect these extinguishers shall be coordinated with the Fire Emergency Services Flight, Fire Prevention Office.

2.5. General Housekeeping Practice.

2.5.1. A high standard of cleanliness is a primary factor in fire prevention. Commanders, Facility Managers, and Supervisors shall be responsible for maintaining a high state of cleanliness and orderliness throughout their buildings.

2.5.2. Waste receptacles shall be emptied at the end of the workday or more often if necessary. Dumpsters and other central disposal units shall be placed at least 10-feet from combustible structures and 5-feet from noncombustible structures.

2.5.3. Metal containers with automatic, self-closing lids shall be used to store oily or paint-soaked rags, steel wool, and other hazardous waste materials. Each container shall be plainly marked for its intended use. The metal lid shall be kept closed and never wedged or blocked open.

2.5.4. Vegetation around the building shall be policed and trimmed at all times.

2.5.5. Furnace, boiler, mechanical, electrical, generator, telephone communications, air compressor, air handling unit, sprinkler riser rooms, and areas under stairs shall not be used for storage of any type. These areas shall be secured for maintenance and emergency response crews only.

2.5.6. Small gasoline engine powered equipment including lawnmowers, snow blowers, generators, portable water pumps, powered gardening tools, and other gasoline engines shall have the fuel drained before storage inside facilities and in compliance with manufactures instructions.

2.6. Space Heaters/Heating Appliances.

2.6.1. Portable kerosene space heaters shall not be used. At the user's request, the Fire Emergency Services Flight shall perform a fire safety inspection of the area to be used. If the area is found to be safe and complies with the Fire Emergency Services Flight instructions, then an AF Form 592, *USAF Welding, Cutting and Brazing Permit*, shall be issued.

2.6.2. Electric space heaters shall comply with Fire Emergency Services guidance and UL, *Underwriter's Laboratory*, or Japanese equivalent of JIS, *Japanese Industrial Standard*, or PSE, *Product Safety Engineering*. Space heaters must have a tip-over shut off feature and thermostatic control to prevent overheating.

2.6.3. Do not use space heaters in conjunction with furniture system outlets, extension cords, surge protectors, or multi-plug adaptors. Space heaters shall be plugged directly into a wall outlet.

2.6.4. Never leave space heaters unattended. Do not use space heaters in flammable or combustible atmospheres.

2.6.5. Space heaters shall have 18 inches of clearance from flammable or combustibles items (curtains, papers, magazines, etc.).

2.7. Candles and Aroma Therapy Devices.

2.7.1. The burning of candles or incense shall not be used in any facility except Family Housing. Decorative candles shall be authorized for display with the wick removed.

2.7.2. The burning of candles and incense shall be authorized in special events at the Officer's /Enlisted Clubs, celebratory parties (birthdays, retirements, etc), religious services at the base chapels, or at the discretion of Fire Emergency Services Flight guidance.

2.7.3. Where authorized, candles must be placed in a non combustible holder and on a solid non-combustible surface out of the reach of children or pets.

2.7.4. Candles shall never be left unattended or used within 18 inches of any flammable or combustible items (curtains, papers, magazines, etc).

2.7.5. Wax hot plates and scented wax warmers shall not be left unattended or used within 18 inches of any flammable or combustible items (curtains, papers, magazines, etc).

2.7.6. Electric air fresheners shall be monitored and refilled when as necessary. These air fresheners shall not be left plugged in empty for extended periods of time.

2.8. Decorations.

2.8.1. Decorative materials such as streamers, crepe paper, scenery, cotton batting, straw, and hay shall be flame resistant and/or comply with Fire Emergency Services Flight guidance.

2.8.2. Lighting and extension cords used outdoors shall be approved for outdoor use by the manufacture.

2.8.3. Electrical holiday decorations will be unplugged when the room or facility is unoccupied.

2.8.4. Christmas tree lighting and wiring shall be in good working order and comply with Fire Emergency Services Flight guidance and UL, *Underwriter's Laboratory*, or Japanese equivalent of JIS, *Japanese Industrial Standard*, or PSE, *Product Safety Engineering*.

2.8.4.1. Live Christmas trees shall not be used in dormitories, public assemblies, hospitals, child care centers, and schools.

2.8.4.2. Trees shall not block or obstruct egress paths.

2.8.4.3. Trees shall be watered every day; when they stop absorbing water, dispose of them.

2.8.4.4. Trees shall be kept away from heat sources. Do not rely on self-applied fire resistive aerosol sprays or chemical treatments to protect the tree.

2.8.4.5. Only indirect lighting is authorized for aluminum trees. Electrical lights must never be placed on metal trees due to the shock hazard.

2.8.4.6. Artificial trees shall be certified as flame resistant by the manufacturer.

2.8.4.7. Individuals living in dormitories shall be permitted to display Christmas decorations to include small artificial trees only. All previously listed fire-safety requirements apply.

2.9. Electrical Fire Safety.

2.9.1. Installation, adjustments or alternations of electrical wiring, personal air conditioning units, or appliances shall be accomplished by 374th Civil Engineer Squadron electricians, authorized contractors, or licensed electricians designated by the 374 CES.

2.9.2. Permanent electrical wiring shall not be exposed.

2.9.3. All receptacles, switches, and outlet boxes shall have cover plates to comply with AFI 91-203, *Air Force Consolidated Occupational Safety Standard*.

2.9.4. Access to electrical power panels shall not be blocked or obstructed; 36 inches of clearance is required around electrical equipment (panel boxes, switch boxes, etc) in compliance with Fire Emergency Services Flight guidance and NFPA 70, *National Electric Code*.

2.9.5. No device shall be installed that interferes with the normal operation of circuit breakers or fuses. All electrical switches will be correctly labeled to show which circuits or devices they control.

2.9.6. Electrical appliances shall comply with Fire Emergency Services Flight guidance and UL, *Underwriter's Laboratory*, or Japanese equivalent of JIS, *Japanese Industrial Standard*, or PSE, *Product Safety Engineering*.

2.9.7. Electrical appliances that do not require continuous operation shall be unplugged when not in use (coffee pots, toaster ovens, pop corn machines, etc).

2.9.8. Extension cords shall not be used in lieu of permanent wiring. Extension cords shall be used for TEMPORARY use only. Temporary electric power and lighting shall be permitted for a period not to exceed 90 days for holiday decorative lighting and similar purposes. They shall be rated for the capacity of the equipment being served and shall be continuous in length without splices or taps. In areas that have insufficient outlets, the Facility Manager shall submit a work order through the 374 CES Customer Service section to have additional outlets installed.

2.9.9. Surge protectors or power strips shall only be plugged directly into a wall outlet.

2.9.10. Multi-plug adaptors shall not be used.

2.9.11. Electrical wiring shall not be taped, stapled, or tacked to building surfaces; shall not be spliced, coiled or placed where they may be damaged or create a hazard; shall not be kinked, stretched, or bent excessively; shall not be walked on nor will equipment be allowed to run over them. If cords must be placed in travel lanes, they shall be protected by molded housings or bridges. Cords and devices shall be rated for use in the area of operation by the manufacturer (flammable or combustible atmospheres, outdoors, etc).

2.10. Cooking.

2.10.1. Cooking shall not be performed unless the area used is specifically designated as a kitchen. Cooking must be supervised at all times. Unattended cooking is the most common fire response at Yokota AB.

2.10.2. The use of open-coil hot plates, oil-type popcorn poppers, and noncommercial deep-fat fryers shall not be used inside base facilities.

2.10.3. Unit Commanders may suspend the use of appliances if violations are noted.

2.10.4. All appliances shall comply with Fire Emergency Services Flight guidance and UL, *Underwriter's Laboratory*, or Japanese equivalent of JIS, *Japanese Industrial Standard*, or PSE, *Product Safety Engineering*.

2.10.5. Coffee makers, soup warmers, hot air popcorn poppers, microwave ovens, and toasters are permitted for use in offices, shops, day rooms, dormitories, and like buildings or rooms. All heat producing items shall be placed on a sturdy non combustible surface and supervised while in use. No other food preparation appliances shall be used without prior approval of the Fire Emergency Services Flight.

2.10.6. Appliances shall not be plugged into furniture system outlets, power strips, surge protectors, multi-plug adaptors, or extension cords. These items shall be plugged directly into wall outlets.

2.10.7. Small microwave ovens may be used in sleeping areas of dormitories and day rooms.

2.10.8. The 374 CES Electric Shop (374 CES/CEOFE) must approve commercial or industrial type ovens with a rating above 2 kilowatts.

2.10.9. Barbecue grills, turkey fryers, or any other open flame cooking appliances shall not be operated indoors, on combustible decking, or within 10-feet of any combustible structure. Charcoal shall be thoroughly soaked with water before disposal. Propane cylinders storage shall comply with NFPA 58, *Liquefied Petroleum Gas Code*, and Fire Protection Services Flight guidance.

2.10.10. Portable cooking equipment fueled by small heat sources that can be readily extinguished with water, such as candles or alcohol-burning equipment (including solid alcohol fuels, gel fuels, chafing fuels, etc) may be used in dining facilities provided adequate precautions are taken to prevent ignition of any combustible materials.

2.11. Commercial Cooking.

2.11.1. Installation and operation of commercial cooking appliances shall be in compliance with NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations* and AFI 91-203, *Air Force Consolidated Occupational Safety Standard*.

2.11.2. A Fire Emergency Services Flight representative shall inspect kitchen hoods, ducts, and exhausts in commercial cooking facilities such as clubs, snack bars, fast-food outlets, bowling alleys, or any other facility where commercial cooking occurs. This inspection includes a review of employee training, installation and maintenance of required fire safety equipment, whether or not hood and duct cleaning has occurred and whether the cleaning frequency is adequate. Fire Emergency Services Flight representatives inspect hood and duct systems to ensure thorough cleaning has been accomplished and serve as the Quality Assurance Evaluator (QAE) when the cleaning is conducted under a service contract.

2.11.3. Commercial cooking equipment shall be provided with a system for smoke and grease-laden vapor removal. An automatic fire suppression system shall be required to protect the cooking equipment, ducts, and grease-removing devices. These systems shall be operational at all times except for scheduled inspections, testing, and routine maintenance. If any of the systems are out of service for any reason, equipment protected by that system shall not be used. Activation of the fire suppression system shall automatically shut down cooking equipment, sound the fire alarm, and signal the Fire Emergency Services Flight.

2.11.4. Grease filters shall be installed in all grease hoods and extraction systems covering cooking equipment. The filters shall be continually maintained in proper operating condition and shall fit properly. Cooking shall not be permitted without the filters installed. Spare filters shall be available for cooking facilities that operate continuously.

2.11.5. All installed grease filters, areas around cooking equipment, and exposed surfaces of hoods shall be thoroughly cleaned daily and more often as necessary to prevent grease buildup.

2.11.6. Hood and exhaust ducts serving cooking equipment shall be thoroughly cleaned every 6 months or more frequently when determined by the Fire Emergency Services Flight. This cleaning cycle includes grease accumulation on fans, roofs, louvers, exterior walls, cupolas, etc., where the system exhausts to the outside. When cleaning is complete, all electrical controls, detection devices, and system components shall be returned to an operable

state by qualified personnel. Cover plates shall be replaced and dampers and diffusers shall be positioned for proper air flow. Specific guidance for cleaning is outlined in NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*.

2.11.7. The exhaust system shall continually operate while the cooking equipment is in use. If an exhaust fan is shut down or removed for repair or replacement, equipment served by that exhaust system shall not be used until the fan is returned to full service.

2.11.8. Portable or temporary cooking equipment that uses grease or oil, such as donut machines and portable deep-fat fryers, shall be located beneath an installed fire extinguishing system.

2.12. Open Fire/Barbeques/Fireworks.

2.12.1. Open burning (campfires, bonfires, burn pits, etc) shall be prohibited. At the user's request, the Fire Emergency Services Flight shall perform a fire safety inspection of the area to be used. If the area is found to be safe and complies with the Fire Emergency Services Flight guidance, then an AF Form 592, *USAF Welding, Cutting and Brazing Permit*, shall be issued.

2.12.2. The use of fireworks shall be strictly limited to commercial contractors, associated with special events, and shall be coordinated with the Fire Emergency Services Flight, Wing Safety and shall comply with AFMAN 91-201, *Explosives Safety Standards*.

2.12.3. Barbecues, turkey fryers, and propane cooking devices shall not be used inside any structure. Barbecue grills that utilize propane cylinders shall not be stored as a connected unit, unless the unit is located and secured at least 5 feet outside the facility. Propane cylinder storage shall comply with NFPA 58, *Liquefied Petroleum Gas Code*, and the Fire Emergency Services Flight guidance.

2.12.4. After cooking operations have completed, the main gas control valve on the tank shall be closed and the unit shall be allowed to cool prior to storage. If grills are to be stored inside, the cylinder shall be disconnected and stored in a covered, secured area at least 5 feet from the facility.

2.13. Tobacco Use.

2.13.1. Designated smoking areas shall comply with AFI 40-102, *Tobacco use in the Air Force*, AFI 91-203, *Air Force Consolidated Occupational Safety Standard*, and Fire Emergency Services Flight guidance.

2.13.2. All installation entry gates will have signs indicating —Tobacco use is prohibited on this installation, except in Designated Tobacco Areas.

2.13.3. Medical treatment facility campuses shall be tobacco-free. Medical treatment facility boundaries will be determined by 374 CES, with coordination by the Medical Group commander and approval of the Installation Commander.

2.13.4. 374 CES will determine designated tobacco areas with input from facility managers and squadron commanders.

2.13.5. Tobacco use on the installation shall be restricted to designated tobacco areas only. Tobacco use outside of the designated tobacco areas, including while walking, is prohibited.

2.13.6. Designated tobacco areas shall be away from common points of facility entry/egress and not in front of buildings or air intake ducts. The distance of a designated tobacco area from a building entry/egress is to be determined by the squadron commander but will be no less than 50 feet.

2.13.7. Designated tobacco areas shall be a minimum of 50 feet from pedestrian walkways, to include parking lots, to prevent secondhand smoke exposure to passersby.

2.13.8. No designated tobacco area shall be within 100 feet of playgrounds to minimize the health risks of secondhand tobacco smoke to children playing, entering or exiting the area.

2.13.9. Designated tobacco areas shall be annotated on an installation map and marked with signs: **“Designated Tobacco Area.”**

2.13.10. Tobacco users are responsible for keeping designated tobacco areas clean and free of cigarette butts and debris. Commanders may remove designated tobacco areas if the area around it or leading up to it is cluttered with trash, cigarette butts, or spittoons.

2.13.11. Tobacco use is prohibited in all Air Force workplaces and all installation recreation facilities, including athletic complexes, golf courses, and beaches, except in designated smoking areas.

2.13.12. Government-owned, -leased, and -managed family housing facilities shall be designated smoke-free where there is a common air-handling unit for multiple individuals or families (i.e., stairwell housing, duplex). For family housing units with separate air-handling units, if secondhand tobacco smoke seeps from a smoking unit to a non-smoking unit, the Installation Commander is authorized to designate the involved units as smoke-free, but other forms of tobacco not including smoking would continue to be permitted.

2.13.13. Tobacco use is prohibited in Air Force vehicles.

2.14. Special Events.

2.14.1. The Fire Emergency Services Flight shall be notified prior to any major social event, activities, concessionaire set up that involves temporary decorations, unusual interior arrangements or an outdoor festival event. A diagram showing the proposed arrangement shall be submitted with event details for approval. The Fire Emergency Services Flight shall inspect the area prior to the event for approval.

2.14.2. Outdoor Events.

2.14.2.1. Emergency access and tent or booth spacing shall be determined by Fire Emergency Services Flight in compliance with NFPA 101, *Life Safety Code*.

2.14.2.2. All tents or booths planning to use any kind of cooking or heating device shall have prior approval from the Fire Emergency Services Flight. All cooking or heating devices shall comply with UL, *Underwriter's Laboratory* or Japanese equivalent of JIS, *Japanese Industrial Standard*, or PSE, *Product Safety Engineering*. All cooking or heating appliances shall be placed on a solid non combustible surface. All cooking shall comply with NFPA 96, *Ventilation Control and Fire Protection of Commercial Cooking Operations*, and Fire Emergency Services Flight guidance.

2.14.2.3. Deep fat fryer spacing shall be 16 inches from any open flame or separated by a steel or tempered glass baffled plate at least 8 inches high. Deep fat fryers shall be placed

on a solid non combustible surface. Protect cooking oil or grease from any kind of water source (including rain).

2.14.2.4. Charcoal cooking devices shall not be utilized under a combustible overhang. Coals shall be allowed to cool and shall be soaked with water prior to disposal.

2.14.2.5. There shall be no flammable or combustibles items within 10 feet of a working grill (charcoal or gas) or within 18 inches of deep fat fryers, tent/booth, or primary electrical wiring.

2.14.2.6. All tent fabric shall meet the flame propagation performance criteria of Test Method 2 in compliance with NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films* or with Fire Emergency Services Flight guidance.

2.14.2.7. Electrical wiring and equipment shall comply with NFPA 70, *National Electric Code*, and Fire Emergency Services Flight guidance.

2.14.2.8. Electrical wiring shall not be taped, stapled, or tacked to building surfaces; shall not be spliced, coiled or placed where they may be damaged or create a hazard; shall not be kinked, stretched, or bent excessively; shall not be walked on nor will equipment be allowed to run over them. If cords must be placed in travel lanes, they shall be protected by molded housings or bridges.

2.14.2.9. All cooking or food heating tents or booths shall be provided a fire extinguisher from the Fire Emergency Services Flight. The fire extinguisher shall remain in a conspicuous location where all tent or booth workers have access to it in the event of an emergency.

2.14.3. Indoor Special Event.

2.14.3.1. All Indoor special events shall be coordinated through Fire Emergency Services Flight for layout and occupant load restrictions.

2.14.3.2. Electrical wiring and equipment shall comply with UL, *Underwriter's Laboratory* or Japanese equivalent of JIS, *Japanese Industrial Standard*, or PSE, *Product Safety Engineering*. Electrical equipment shall comply with NFPA 70, *National Electric Code*, and Fire Emergency Services Flight guidance.

2.14.3.3. Electrical wiring shall not be taped, stapled, or tacked to building surfaces; shall not be spliced, coiled or placed where they may be damaged or create a hazard; shall not be kinked, stretched, or bent excessively; shall not be walked on nor will equipment be allowed to run over them. If cords must be placed in travel lanes, they shall be protected by molded housings or bridges.

2.14.3.4. All booth and egress path requirements shall comply with NFPA 101, *Life Safety Code*, and Fire Emergency Services Flight guidance.

2.14.3.5. All cooking must comply with NFPA 96, *Ventilation Control and Fire Protection of Commercial Cooking Operations*, and Fire Emergency Services Flight guidance.

Chapter 3

OCCUPANCY REQUIREMENT

3.1. Notification of Public Gathering and Change of Occupancy.

3.1.1. The Fire Emergency Services Flight shall be notified prior to any change of occupancies, change of usage of the building, or change of building layout. The area shall meet new construction requirements of NFPA 101, *Life Safety Code*, and shall be inspected/approved by the Fire Emergency Services Flight.

3.2. Public Assembly.

3.2.1. These occupancies include, but are not limited to, all buildings or portions of buildings used for a gathering of 50 or more persons for such purpose as deliberations, worship, entertainment, eating, drinking, amusement, or similar uses; or used as a special amusement building, regardless of occupant load. These occupancies include clubs, recreational facilities, AAFES facilities, theaters, chapels, restaurants, snack bars, etc. Managers and supervisors of public assembly facilities will constantly be alert for hazards to life involved with these facilities.

3.2.2. Each new employee shall receive fire extinguisher training, the use of other manual fire suppression equipment, fire reporting, and orderly exiting for the facility. Annual refresher training shall be accomplished for each person. Personnel who receive training shall have it documented and kept in the Facility Manager Folder, Fire Safety section.

3.2.3. Assembly occupancies shall be provided with a minimum of one trained Crowd Control Manager. Where the occupant load is more than 250, an additional trained Crowd Control Manager shall be provided at a ratio of one Crowd Control Manager for every additional 250 occupants. It is the Facility Manager's responsibility to notify the Fire Emergency Services Flight, Fire Prevention Office when a Crowd Control Manager changes. Crowd Control Manager training is provided by the Fire Emergency Services Flight.

3.2.4. Operating personnel shall be designated to check all exit doors prior to entry of patrons to ensure that the doors are unlocked and panic hardware is operational.

3.2.5. Fire drill training shall be provided by the on-duty manager at least quarterly for employees. The drills shall be conducted prior to opening or just after closing.

3.2.6. Managers and supervisors shall conduct a thorough inspection of their facility within one hour after closing and annotate in a log that the facility is fire safe.

3.2.7. The maximum capacity or occupant load shall be posted in a conspicuous location near the main exit/entrance of all public assembly areas. Capacity or occupant load shall not exceed the maximum standard established by Fire Emergency Services Flight in reference with NFPA 101, *Life Safety Code*.

3.3. Educational Occupancy.

3.3.1. These occupancies include all buildings or portions of buildings used for educational purposes from kindergarten through twelfth grade that are occupied by six or more persons for four or more hours per day or more than twelve hours per week.

3.3.2. Two fire drills shall be conducted for educational occupancies during the first month of a new school term and monthly thereafter.

3.3.3. Pre-schools, Sure Start, Youth Program, Family Day Care Program, and Child Day Care Programs shall have monthly fire drills.

3.3.4. Artwork and teaching materials shall not exceed 20 percent of the wall area in a building that is not protected throughout by an approved, supervised automatic sprinkler system.

3.3.5. Artwork and teaching materials shall not exceed 50 percent of the wall area in a building that is protected throughout by an approved, supervised automatic sprinkler system.

3.4. Family Housing

3.4.1. Sponsors shall be fully responsible for actions of family members in matters of fire prevention. They shall ensure dependents comply with the fire prevention and safety requirements. Occupants shall know how to operate home fire extinguishers, notify Fire Emergency Services Flight in case of a fire, and evacuate their quarters.

3.4.2. Cooking, baking, or broiling appliances shall not be left unattended. Stove (including oven and broiler) and exhaust fan and grease hood shall be kept clean and free of grease. Remove filters at least once a month and wash in warm, soapy water. Combustible materials (paper towels, newspapers, etc) or flammable liquids (alcoholic beverages, cooking sprays, etc.) shall not be stored near (cabinets, counter tops, etc) the stove.

3.4.3. Use only appliances that comply with UL, *Underwriter's Laboratory*, or Japanese equivalent of JIS, *Japanese Industrial Standard*, or PSE, *Product Safety Engineering*.

3.4.4. Clean clothes dryer lint traps after each use.

3.4.5. Occupants shall be responsible for inspecting their fire extinguisher monthly. Make sure fire extinguishers are in accessible area and good working order. If the extinguisher is not serviceable, take the extinguisher to the Self Help store for replacement.

3.4.6. Smoke detectors shall be tested monthly. Occupants shall not tamper, block, paint, hang, or cover any fire protection devices. A clearance of at least 18 inches shall be maintained around ceiling fixtures, fire detection, and fire suppression systems. Any defective detectors shall be reported to tower maintenance at 225-8452 or CE Customer Services at 225-5270/5282.

3.4.7. Storage of flammable liquids such as gasoline is limited to 5 gallons. Flammable liquids shall be stored in approved containers and stored in a safe and secured area. No refueling shall be conducted inside or within 10 feet of any building, garages, basements, or attached right of ways.

3.4.8. Matches or cigarette lighters shall be kept out of reach from children. Ensure all smoking material has been extinguished before disposal.

3.4.9. Propane cylinders shall be limited to two cylinders per household. The cylinders shall be stored outside the facility, at least 5 feet from the exit and not in the path of egress.

3.4.10. Bicycles, strollers, wagons, and similar items shall not be stored in exit corridors, stairwells, master bedroom balconies and lobbies within the towers.

3.5. Dormitory and Lodge Occupancy.

- 3.5.1. All items in paragraph 3.4. shall apply.
- 3.5.2. Candles, incense, or any device which produces a constant flame are prohibited.
- 3.5.3. Cooking appliances other than coffee makers and microwave ovens are prohibited.
- 3.5.4. Dormitory Managers and lodge managers shall monitor clothes dryers daily to eliminate lint accumulation in and around the machines. Lint accumulations shall be removed after each drying operation.
- 3.5.5. Indoor motorcycle storage or maintenance of any kind shall be prohibited.
- 3.5.6. Doors that open onto exit access corridors shall be self-closing and self-latching. These doors shall not be propped opened at any time.

3.6. Child Care Facilities.

- 3.6.1. The facility shall be certified by Air Force Civil Engineer Center and have the original Fire Safety Facility Certification certificate posted in the facility.
- 3.6.2. Evacuation procedures/plan shall be approved by the Fire Emergency Services Flight and be posted in a conspicuous location.
- 3.6.3. Fire drills shall be performed by all persons in the building once a month. Under no circumstances shall more than two months elapse between drills. Facility fire alarms are sounded for every drill. Drills shall be executed at different hours of the day and evening, including when children are resting or sleeping.
- 3.6.4. The center director or designee shall inspect all exits daily to ensure all doors, stairs, and other exits are in proper condition, not obscured, unobstructed, will easily and immediately open in the direction of egress, and all egress paths are free from debris, ice or snow, etc. Problems shall be remedied immediately.
- 3.6.5. A trained (task certified) senior member of the Child Development Center staff shall conduct fire prevention inspections monthly (use Air Force Civil Engineer Support Agency Inspection Guide, Air Force Child Development Facilities Fire Protection/Prevention Inspection). A copy of the latest inspection form shall be posted in a conspicuous place in the facility.
- 3.6.6. Draperies, curtains, and other loosely hanging furnishing and decorations shall be flame resistant as described in NFPA 101, *Life Safety Code*.
- 3.6.7. Artwork and teaching materials shall not exceed 20 percent of the wall area in a building that is not protected throughout by an approved, supervised automatic sprinkler system.
- 3.6.8. Artwork and teaching materials shall not exceed 50 percent of the wall area in a building that is protected throughout by an approved, supervised automatic sprinkler system.
- 3.6.9. Staff members need to meet the required staff-to-child ratio shall be on-duty, alert, awake, and physically present at the facility, and are available to help with an evacuation at all times.

Chapter 4

MEANS OF EGRESS

4.1. Exits/Exit Doors.

4.1.1. Every required exit, exit access, exit discharge, and public way shall be continuously maintained free of all obstructions or impediments in the case of fire or other emergencies. Those doors shall be arranged for full compliance with NFPA 101, *Life Safety Code*, and Fire Emergency Services Flight guidance.

4.1.2. Doors shall be arranged to be readily opened from the egress side where required. Locks provided shall not require the use of a key, tool, special knowledge or effort for operation from the inside of the building. Restrictive hardware, such as padlocks, hasps, throw-bolts and crossbars shall not be installed on any exit door except as permitted by NFPA 101, *Life Safety Code*, or Fire Emergency Services Flight guidance. Doors may be provided with an alarm device for additional control measures.

4.1.3. Hangings or draperies shall not be placed over exit doors or otherwise be located to conceal or obscure any exit. Mirrors shall not be placed on exit doors; mirrors shall not be placed in or adjacent to any exit in such a manner as to confuse the direction of exit.

4.2. Stairways.

4.2.1. Stairway shall provide a continuous, unobstructed, safe path of travel to the exit discharge or a safe area. Stairway enclosures shall not be used for storage or any purpose other than a stairway.

4.2.2. Stairway enclosures shall be protected by self-closing doors. These doors shall not be wedged or blocked in the opened position which prevents the doors closing automatically, unless specifically designed.

4.3. Exit signs/Emergency Lighting.

4.3.1. All exit signs, required by NFPA 101, *Life Safety Code*, shall be properly illuminated to identify egress routes in all facilities.

4.3.2. Emergency lighting shall be provided and maintained where required by NFPA 101, *Life Safety Code*.

4.4. Illumination of Means of Egress. The floors of means of egress shall be illuminated at all points, including angles and intersections of corridors and passageways, stairways, landings of stairs and exit doors where required by NFPA 101, *Life Safety Code*.

4.5. Marking of Means of Egress. Exits shall be marked by an approved sign, readily visible from any direction or exit access where required by NFPA 101, *Life Safety Code*. **Exception:** Main exterior exit doors that are obviously and clearly identifiable as exits.

Chapter 5

INSTALLED FIRE DETECTION/SUPPRESSION SYSTEM

5.1. Maintenance and Testing.

5.1.1. Fire detection/suppression systems inspection, testing, and maintenance shall be conducted in accordance with UFC 3-601-02, *Operation and Maintenance: Inspection, Testing, and Maintenance of Fire Protection Systems*.

5.1.2. Prior to and after performing a test or maintenance on the fire system, technicians shall be responsible for informing the Fire Emergency Services Flight and the Facility Manager. The Facility Manager shall be responsible for informing the occupants.

5.1.3. Fire detection/suppression systems shall be restored to service as promptly as possible after each test, activation, or failure. These systems shall be maintained in normal ready condition for operations. The Fire Emergency Services Flight shall be immediately notified of any system that goes out of service.

5.1.4. When a fire protection system is out of service for more than 4 hours, the Fire Emergency Services Flight shall be notified by the Facility Manager or other responsible user. The building shall be evacuated or the user/occupant shall establish a fire watch approved by the Fire Emergency Services Flight for all areas left unprotected by the out of service system. The facility shall remain unattended or fire watch shall be maintained until the system has been returned to full working order. Facility Managers shall use the Operational Risk Management process, with advice from the Fire Emergency Services Flight and Wing Safety office, to determine what extent the facility may be used while correction is pending.

5.1.5. Fire detection/suppression devices shall not be obstructed, blocked, or painted over.

5.1.6. Fire Department connections, sprinkler connections, post indicator valves, standpipes, hose cabinets, etc shall not be obstructed or blocked. These devices shall remain accessible in compliance with NFPA 13, *Installation of Sprinkler Systems*, NFPA 25, *Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, and Fire Emergency Services Flight guidance.

5.1.7. Tampering with fire alarm systems is prohibited. Only the Fire Emergency Services Flight, 374 CES Operation Flight technicians, and contractors authorized by 374 Contracting Squadron shall be authorized to open and operate fire alarm systems.

5.2. Acceptance Test. Prior to final acceptance of any new or renovated fire detection/suppression system, a complete test shall be conducted in the presence of the Fire Emergency Services Flight representative and the 374 CES Operation Flight technicians/craftsman.

5.3. Fire Doors/Fire Shutters.

5.3.1. Fire doors and shutters shall be operational at all times and shall be kept closed, latched or arranged for automatic closing.

5.3.2. Areas around fire doors and shutters shall be kept clear of any obstruction that would interfere with the free operation of a door.

5.3.3. Fusible links and heat-actuated release devices shall not be painted.

5.4. Fire Hydrant.

5.4.1. The use of fire hydrants for any purpose other than firefighting shall be prohibited without approval from the Fire Emergency Services Flight.

5.4.2. Parking vehicles or equipment placement shall not be within 15 feet of a fire hydrant; access to fire hydrants shall not be obstructed.

5.4.3. Fences, barriers or bushes shall be at least 5 feet from any hydrant and shall not block or obstruct the hydrant.

5.4.4. The Fire Emergency Services Flight shall be notified of any hydrant out of service or any proposed water curtailment that will affect fire hydrants. An "Out of Service" sign shall be placed on an inactive fire hydrant and removed when it is returned to service by 374 CES, Operation Flight.

5.5. Fire Lane. Fire lanes shall not be obstructed in any manner, including vehicle parking. When it becomes necessary to block any street or fire lane, the responsible organization shall notify the Fire Emergency Services Flight in advance with the date, time, and length of the blockage.

Chapter 6

HAZARDOUS MATERIALS

6.1. Hazardous Material Identification.

6.1.1. Material Safety Data Sheet (MSDS) information shall be readily available to all workers. MSDS's maintained electronically or paper based shall be permitted as long as there are no barriers to immediate access by employees.

6.1.2. All chemical or hazardous items shall be labeled accordingly. Labels shall not be obscured, removed or defaced in any way.

6.1.3. All chemical or hazardous items shall have a current and accurate inventory listing. These inventories shall be maintained in the work area or continuity binder.

6.2. Explosive.

6.2.1. Explosives, blasting agents and pyrotechnics shall be stored, handled and used to comply with NFPA 495, *Explosive Materials Code*; AFMAN 91-201, *Explosives Safety Standards*; and Fire Emergency Services Flight guidance.

6.2.2. Explosives, blasting agents or pyrotechnics shall not be transported by any person or agency on the installation without notifying the Fire Emergency Services Flight, Dispatch Center. All movements or relocation of explosive (except 1.4) are included in this requirement.

6.2.3. Proper NFPA 704, *Identification of the Hazards of Materials for Emergency Response*, and fire symbols shall be posted on all buildings, rooms or areas storing explosives as required by the explosives license for that area. Personnel in charge of explosives must promptly notify the Fire Emergency Services Flight, Fire Prevention Office each time there is a change in the explosives or hazard symbols.

6.2.4. Fire drills shall be conducted within explosive storage areas at intervals not to exceed six months. Coordinate drills through the Fire Emergency Services Flight, Fire Prevention Office.

6.2.5. Vegetation control around surrounding storage areas shall be kept clear of excess vegetation by establishing appropriate mowing and weed control. To eliminate a substantial fire hazard, vegetation shall be removed around explosive storage areas after mowing has been performed.

6.3. Storage and Handling of Flammable and Combustible Liquids.

6.3.1. Flammable and combustible liquids, including spray cans shall be handled and stored to comply with AFI 91-203, *Air Force Consolidated Occupational Safety Standard*, and NFPA 30, *Flammable and Combustible Liquids Code*. Flammable liquids are defined as any liquid with a flash point below 100° Fahrenheit. Examples of flammable liquids include gasoline, alcohol, naphtha, lacquer paints and thinners. Combustible liquids are defined as any liquid having a flashpoint greater than 100° Fahrenheit. Combustible liquids include kerosene, mineral spirits, #2 diesel fuel and JP-8.

6.3.2. Flammable and combustible liquid storage shall be conspicuously labeled with “Flammable Keep Fire Away” or “No Smoking within 50 Feet.”

6.3.3. Authorized storage areas (i.e., chemical sites) for flammable and combustible liquids shall be located not less than 50 feet from other structures.

6.3.4. When not in use, all flammable or combustible liquid containers (including safety cans or pots) shall be stored in approved flammable storage cabinets or areas (approved rooms, outside shed/storage, etc.). See Attachment 3.

6.3.5. Flammable storage cabinets shall be approved by the Fire Emergency Services Flight, Fire Prevention Office by way of an official memo. This memo shall be kept in the Facility Manager Folder, Fire Safety section.

6.3.6. Cabinets shall be constructed to comply with the requirements of AFI 91-203; *Air Force Consolidated Occupational Safety Standard*, and NFPA 30, *Flammable and Combustible Liquids Code*.

6.3.7. Flammable storage cabinets shall not be located next to exit doors, nor physically obstruct a means of egress from the building or area. Additionally, cabinets shall not be placed under stairways or near any other egress routes.

6.3.8. If the cabinet is located indoors, the ventilation caps/bungs shall be in place. If the cabinet must be vented, venting shall be performed through piping to the outdoors. For outdoor storage, the vent caps/bungs shall be removed.

6.3.9. Flammable and combustible liquids shall be located outside designated storage areas only while in use, not to exceed the following amounts:

6.3.9.1. 25 gallons of Class IA liquids in closed, rated containers.

6.3.9.2. 120 gallons of Class IB, IC, II or III liquids in closed, rated containers.

6.3.9.3. 120 gallons of Class IB, IC, II or III liquids in a single, portable, rated tank.

6.3.10. Rags and other combustible materials shall not be stored inside flammable storage cabinets. Unopened shipping boxes/containers and protective packaging from the manufacturers, which contain flammable liquids, shall be permitted. However, once the box/container is opened it shall be discarded. Boxes/containers, which are opened for labeling purposes, shall be approved for storage only if the container is full and complete. Protective over packing that secures containers from breaking, tipping over or spilling shall be permitted until empty of all containers.

6.3.11. Grounding of flammable storage cabinets shall not be required, unless transferring liquid products.

6.3.12. Flammable/combustible liquids shall not be stored in any public assembly facility, club, dormitory, office areas, desks, unattended work benches, buildings which normally are used as sleeping quarters, and other similar type locations.

6.3.13. Gasoline or other flammable/combustible liquid containers, utilized or sold shall be certified by UL, *Underwriter's Laboratory*, or Japanese equivalent of JIS, *Japanese Industrial Standard*, or PSE, *Product Safety Engineering*, have a tight closing screw or spring type lid, and fixed with a suitable pouring spout. Glass or plastic containers shall not be used

for storing, dispensing or carrying flammable liquids unless they are approved for this purpose and/or are received from the manufacturer in this configuration.

6.3.14. Hand sanitizer, with alcohol, is highly flammable and should be stored and handled in compliance with NFPA 30, *Flammable and Combustible Liquids Code*, and Fire Emergency Services Flight guidance.

6.3.15. Open flames, sparks, or spark-producing devices shall not be allowed within 50 feet of flammable liquid work and storage areas.

6.4. Compressed Gas Cylinders.

6.4.1. Storage, handling, and labeling of compressed gas cylinders shall comply with NFPA 55, *Compressed Gases and Cryogenic Fluids Code* and Fire Emergency Services Flight guidance.

6.4.2. All flammable gas storage areas shall be conspicuously posted with the words "Flammable Gas" and "No Smoking within 50 Feet."

6.4.3. Gas cylinders shall never come in contact with fire, sparks or electrical circuits.

6.4.4. Cylinders, to include propane cylinders 20 lbs and up, in storage shall be capped and stored outdoors, in a covered and secured area. The cylinder shall be kept free from vegetation and not sitting in contact with the ground where water can accumulate.

6.4.5. Cylinder shall be stored in an upright position or such that the valve is in contact with the vapor space inside the cylinder.

6.4.6. Non compatible materials shall be separated by 20 feet or by a fire wall at least five feet tall and a half hour fire resistance rating.

6.4.7. Storage and handling of LPG cylinders shall comply with NFPA 58, *Standard for the Storage and Handling of Liquefied Petroleum Gases*.

Chapter 7

FIRE SAFETY STANDARDS DURING CONTRACTOR PERFORMANCE

7.1. General Requirements.

7.1.1. These standards shall become a part of applicable contract specifications for work to be performed. These standards shall apply to all construction, reconstruction, modification, demolition, rehabilitation, alteration, repairs and maintenance of existing facilities. Basic safeguards against construction fire hazards shall be provided during project planning.

7.1.2. The contractor or an individual appointed shall be placed in charge of fire safety of the work project. The responsibilities shall include: assuring the availability, operation, and location of fire protection equipment, general supervision of safeguards and location of portable heating equipment, and establishment and maintenance of safe cutting and welding operations.

7.1.3. Contractor's materials and equipment shall not be stored in a location or manner which will create a fire exposure to facilities adjacent to the project site. Fire hydrants shall not be fenced in on construction sites.

7.1.4. All fires, regardless of size or condition, shall be reported to the Fire Emergency Services Flight immediately. Any persons discovering a fire or suspected fire shall alert the building occupants by any means available. The Fire Emergency Services Flight shall be notified in the following manner: from a base phone, dial 911; from a Japanese cell phone dial 042-552-2510, wait for the tone and dial 911.

7.1.5. Portable fire extinguishers shall be supplied by the contractor as required by the Fire Emergency Services Flight. Fire extinguishers shall be readily available and kept in a fully operational condition at all times.

7.1.6. Work that includes the fire detection or suppression systems, utility outages, road closures, and confined space entries, shall be approved by the Fire Emergency Services Flight, Fire Prevention Office prior to beginning the work. Only authorized technicians shall alter, extend, or repair installed systems.

7.2. Flammable and Combustible Liquids and Gasses.

7.2.1. Every effort shall be made to limit flammable liquid quantities to daily use.

7.2.2. Flammable liquids exceeding daily quantities shall be properly stored in approved locations only.

7.2.3. Flammable storage areas shall be marked with bilingual signs.

7.3. Hot Work Operations.

7.3.1. Any hot work operations shall be approved by the Fire Emergency Services Flight, Fire Prevention Office prior to starting. The job site shall be inspected and have an AF Form 592, *Welding and Cutting permit*, issued. Responsible hot work operation supervisors shall take the following actions:

7.3.1.1. Follow checklist on reverse side of the AF Form 592, *Welding and Cutting permit*.

7.3.1.2. Remove combustible material to a safe location.

7.3.1.3. Ensure that adequate fire extinguishers are provided and that one person is designated to operate the extinguisher in the event of fire.

7.3.1.4. Ensure fire detections and suppression systems will not be affected by the operation being performed.

7.3.2. Thoroughly inspect the area after operations has been completed to ensure that the area is free of fire hazards caused by the operation.

7.3.3. Return the welding permit to the Fire Emergency Services Flight, Fire Prevention Office upon expiration of welding permit or completion of the work.

7.4. Driving Responsibilities.

7.4.1. Drivers shall yield the right-of-way to all emergency response vehicles while emergency lights and sirens are in use.

7.4.2. Vehicles shall not be driven over fire hose and shall not proceed through areas where firefighting operations are being conducted; unless directed by a designated traffic control representative.

MARK R. AUGUST, Colonel, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

DODI 6060.2, *Child Development Programs*, 25 August 1998

UFC 3-600-01, *Fire Protection Engineering for Facilities*, 26 September 2006

UFC 3-601-02, *Operation and Maintenance: Inspection, Testing, and Maintenance of Fire Protection Systems*, 8 September 2010

UFC 4-740-14, *Design: Child Development Centers*, 1 August 2002

AFI 32-10141, *Planning and Programming Fire Safety Deficiency Correction Projects*, 3 March 2011

AFI 32-2001, *Fire Emergency Services Program*, 9 September 2008

AFI 34-248, *Child Development Centers*, 1 October 1999

AFI 34-249, *Youth Programs*, 1 June 2000

AFI 34-276, *Family Child Care Programs*, 1 November 1999

AFI 40-102, *Tobacco Use in the Air Force*, 26 March 2012

AFI 90-821, *Hazard Communication*, 30 Mar 2005

AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, 15 June 2012

AFMAN 34-251, *Air Force School-Age Program*, 1 March 1998

AFMAN 91-201, *Explosive Safety Standards*, 12 January 2011

374 AWPAM 32-8, *Military Family Housing Brochure*, 21 December 2010

NFPA 13, *Installation of Sprinkler Systems*, 2011 Edition

NFPA 25, *Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 2011 Edition

NFPA 30, *Flammable and Combustible Liquids Code*, 2012 Edition

NFPA 55, *Compressed Gases and Cryogenic Fluids Code*, 2013 Edition

NFPA 58, *Liquefied Petroleum Gas Code*, 2011 Edition

NFPA 70, *National Electric Code*, 2011 Edition

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, 2011 Edition

NFPA 101, *Life Safety Code*, 2012 Edition

NFPA 495, *Explosive Materials Code*, 2010 Edition

NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*, 2010 Edition

Adopted Forms

AF Form 55, *Employee Safety and Health Record*

AF Form 103, *Base Civil Engineering Work Clearance Request*

AF Form 218, *Facility Fire Prevention/Protection Record*

AF Form 332, *Base Civil Engineer Work Request*

AF Form 592, *USAF Welding, Cutting and Brazing Permit*

AF Form 847, *Recommendation for Change of Publication*

AF Form 1487, *Fire Prevention Visit Report*

AF Form 2047, *Explosives Facility License*

Terms

Accessible Means of Egress—Accessible means of egress is a path of travel that is usable by a person with severe mobility impairment and that leads to a public way or an area of refuge.

Approved—Acceptable to the Authority Having Jurisdiction.

Authority Having Jurisdiction (AHJ)—An organization or office responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, and installation, or a procedure.

Certified—Recognized as having met special qualifications.

Code—A standard that is and extensive computation of provisions covering a broad subject matter or that is suitable for adaption into law independently of other codes and standards.

Combustible—Combustible liquids are defined as any liquid having a flashpoint greater than 100° Fahrenheit.

Compliance—Meeting the minimum standards set forth by applicable codes or regulations.

Conspicuous—Obvious to the eye or mind.

Evacuate—To withdraw from a place in an organized way especially for protection.

Exemption—An approved permanent change to a procedure, criterion, or rule prescribed in standards which provide an equivalent degree of protection to personnel.

Exit—Exit is a portion of a means of egress that is separated from all other spaces of the building or structure by construction or equipment as required providing a protected way of travel to the exit discharge. Exits include exterior exit doors, exit passageways, horizontal exits, and separated exits or ramps. For more detail consult the National Fire Protection Association 101, *Life Safety Code*.

Facility/Building Manager—Facility/Building manager is a designated person who signs a receipt for any facility under their jurisdiction. Each facility/building manager is responsible for the fire safe conditions of the facility and equipment under his or her control.

Fire Alarm System—A system of alerting devices that takes a signal from fire detection or extinguishing equipment and alerts building occupants or proper authorities of a fire condition.

Fire Detection System—A system of detection devices, wiring and supervisory equipment used for detecting fire or product of combustion and then signaling that these elements are present.

Fire Door—An internal door installed in a building to separate sections or certain areas to prevent damage by heat or smoke in the event of a fire. Designed to meet the special criteria and certified by an appropriate testing organization.

Fire Hazard—Any situation, process, material, or conditions that, on the basis of applicable data, may cause a fire or explosion or provide a ready fuel supply to augment the spread or intensity of the fire or explosion and that poses a threat to life or property.

Fire Lane—A fire department access road, which is marked with approved signs or other approved notices.

Fire Protection—Methods used to control or extinguish a fire, which includes actions taken to limit adverse environmental, social, political, economical, and life-threatening effects of fire.

Fire Safety Deficiency (FSD)—A condition (including noncompliance with standards) that reduces fire safety below acceptable levels, but by itself does not ordinarily cause a fire. FSDs often accelerate or contribute to the spread of fire.

Fire Suppression System—A fire safety system designed to protect facilities from heat, flame, smoke, or other products of combustion, explosion, or structural collapse.

Fire Wall—A wall with a specified degree of fire resistance that is designed to prevent the spread of fire within a structure or between adjacent structures.

Flammable—Flammable liquids are defined as any liquid with a flash point below 100° Fahrenheit.

Functional Manager—The senior operating official at all levels exercising managerial control of an activity or operation. This individual usually can acquire and commit resources of the abatement of occupational safety and health hazards. Functional Managers are designated by the MAJCOM or installation commanders.

Handling—To act or perform a required function with regard to a specific object or process.

Impede—To interfere with or slow the progress of someone or something.

Labeled—Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the Authority Having Jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacture indicates compliance with appropriate standards or performance in a specified manner.

Listed—Equipment, materials, or services included in a list published by an organization that is acceptable to the Authority Having Jurisdiction and concerned with evaluation of product or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

Maintain—To keep in an existing state or preserve from failure.

National Fire Protection Association (NFPA)—An independent and nonprofit organization whose mission is safeguarding the environment from fire using scientific and engineering techniques and education. Develop codes and standards that are used by the US Air Force.

Obstructed—Prevent clear passage to cause a blockage in a road, course, or passage.

Occupancy Classification—The classifications given to structures by the model code used in that jurisdiction based on the intended use for the structure.

Operation—Performance of a practical work or of something involving the practical application of principles or processes.

Permitted—To consent to expressly or formally.

Proper—Strictly limited to a specific thing or place.

Required—Mandatory instruction as necessary or essential.

Responsibility—An act or duty for which someone is clearly accountable.

Risk Assessment Code (RAC)—An expression of degree of risk in terms of hazard severity and mishap probability. Fire, safety, or bioenvironmental engineering personnel assign RACs.

Serviceable—Fit for use; of adequate quality.

Shall—Indicates a mandatory requirement.

Storage—Space or place where something is kept.

Supervised—To oversee or pay attention to something or someone.

Unattended—Leaving something without proper supervision.

Attachment 2

FACILITY FIRE SAFETY CHECKLIST


Figure A2.1. Sample Fire Safety Checklist

Facility Number	Office Symbol	Date	Time
Facility Manager Name		Phone Number	
		YES	NO
		REMARKS	
EXTERIOR			
Is outside of the building clear of all obstruction for emergency access?			
Is any hazard outside the building properly stored/identified?			
EXIT			
Are exit signs lit and in working condition?			
Are emergency lighting systems in working condition?			
Are all exits and fire aisles clearly marked, clear of obstructions and unlocked when the facility is occupied?			
EXTINGUISHER			
Are extinguishers properly mounted, unobstructed and in serviceable condition?			
Are extinguishers inspected monthly and properly labeled?			
HOUSEKEEPING			
Are foyers, entrance halls and stairwells clear and not being utilized for storage areas?			
Is trash being removed from the building daily?			
Are fire doors/shutters kept clear and in working condition?			
Are storage areas properly maintained?			
Is the clearance under sprinklers, detection system and lighting fixture a minimum of: 18 inches for sprinklered facilities? 24 inches for non-sprinklered facilities?			
HAZARDOUS MATERIALS			
Are flammable liquids identified and being stored properly?			
Is there a MSDS available for all Hazardous Materials?			
ELECTRICAL			
Do power strips have surge protectors and are they being used properly?			
Are unnecessary electrical appliances and equipment turned off at the end of each day?			
EMERGENCY PLAN			
Are all personnel in the facility trained in fire prevention practices? Are they familiar with proper fire reporting and building evacuation procedures?			
Is there a fire evacuation plan established and filed in the facility manager folder?			
OTHERS			
Copies of AF Form 1487, Facility Inspection Checklist and pertinent AF Form 332s need to be kept in the facility manager folder.			

Attachment 3

SAMPLE FLAMMABLE LOCKER LETTER

Figure A3.1. Sample Flammable Locker Letter

	DEPARTMENT OF THE AIR FORCE PACIFIC AIR FORCES OFFICIAL USE ONLY
<u>DD MMM YY</u>	
MEMORANDUM FOR <u>YOUR UNIT/ORGINIZATION</u>	
FROM: 374 CES/CEFP	
SUBJECT: Flammable Locker for <u>YOUR BUILDING</u>	
<ol style="list-style-type: none">1. IAW AFI 91-203 and Yokota AB AWI 32-2001, the flammable locker for <u>YOUR BUILDING NUMBER</u> will be located <u>SPECIFIC LOCATION OF THE FLAMMABLE LOCKER</u>.2. Flammable lockers will have an inventory and MSDS readily available for all occupants. It is the Facility Manager's responsibility to notify the Fire Emergency Services Flight of contents or substantial quantity changes.3. Please direct all questions on this matter to the Fire Prevention Office at 225-9112.	
<p>//SIGNED// <u>FIRE INSPECTOR NAME</u> Inspector, Fire Emergency Services 374th Civil Engineer Squadron</p>	